Application No. 10/697,503 Amendment dated 01/14/2009 Reply to Office Action dated 10/14/2008 Page 2 of 8

## LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Cancelled)
- 2. (Previously Presented) The system of claim 17, wherein the speculative data load is loaded in the pipeline.
- 3. (Previously Presented) The system of claim 17, wherein one or more of the data loads in the pipeline are not dependent on any specific data load and not selectively flagged.
- 4. (Previously Presented) The system of claim 17, wherein the flag is a bit within the instruction.
- 5. (Previously Presented) The system of claim 17, wherein the flag is attached to the instruction.
- 6. (Previously Presented) The system of claim 17, wherein each flagged instruction is flushed from the pipeline upon the determination of a misprediction for a data load.
- 7. (Previously Presented) The system of claim 17, wherein the fast-load data cache includes a directory.
- 8. (Previously Presented) The system of claim 17, wherein the fast-load data cache does not include a directory.

Application No. 10/697,503 Amendment dated 01/14/2009 Reply to Office Action dated 10/14/2008 Page 3 of 8

- 9. (Cancelled)
- 10. (Previously Presented) The method of claim 19, further comprising the step of loading the speculative data load into the pipeline.
- 11. (Previously Presented) The method of claim 19, wherein the step of selectively flagging the one or more instructions does not flag an instruction that is not dependent on a specific instruction.
- 12. (Previously Presented) The method of claim 19, wherein the step of selectively flagging a dependant instruction occurs through altering a bit within the dependant instruction.
- 13. (Previously Presented) The method of claim 19, wherein the step of selectively flagging the dependant instruction occurs through attaching a flag to the dependant instruction.
- 14. (Previously Presented) The method of claim 19, further comprising the step of flushing the flagged dependent instruction from the pipeline upon the determination of a misprediction of a corresponding data load.

## 15-16. (Cancelled)

- 17. (Previously Presented) A computer architecture, comprising:
  - at least one pipeline able to selectively load, execute and flush a series of instructions and capable of selectively flagging each of the series of instructions with a flag to indicate dependence upon the load of a speculative instruction;
  - at least one fast-load data cache that loads at least one speculative data load relative to the speculative instruction into the pipeline;

Application No. 10/697,503 Amendment dated 01/14/2009 Reply to Office Action dated 10/14/2008 Page 4 of 8

- at least one L1 data cache that loads at least one non-speculative data load, corresponding to the speculative instruction, into the pipeline a predetermined number of cycles after the fast-load data cache loads the speculative data load;
- a circuit that determines if the speculative data load is a misprediction; and a circuit that causes:

if the speculative load is a misprediction, the pipeline to inhibit execution of the speculative load and any instructions dependant thereon and to execute the non-speculative load and any instructions dependant thereon; and if the speculative load is not a misprediction, the pipeline to execute the speculative load and any instructions dependant thereon and to inhibit the non-speculative load and any instructions dependant thereon.

## 18. (Cancelled)

- 19. (Previously Presented) A method for executing instructions in a computer architecture that includes a pipeline, the method comprising the actions of:
  - a. loading a speculative load into the pipeline;
  - b. loading a non-speculative load into the pipeline a predetermined number of cycles after the action of loading a speculative load;
  - c. if the speculative load was a misprediction, then invalidating the speculative load in the pipeline and executing the non-speculative load, otherwise executing the speculative load and invalidating the non-speculative load.